



$$a = 4 \text{ in}$$

$$P = 3 \text{ sec}$$

$$d = 0$$

$$c = 0$$

$$P = \frac{2\pi}{b}$$

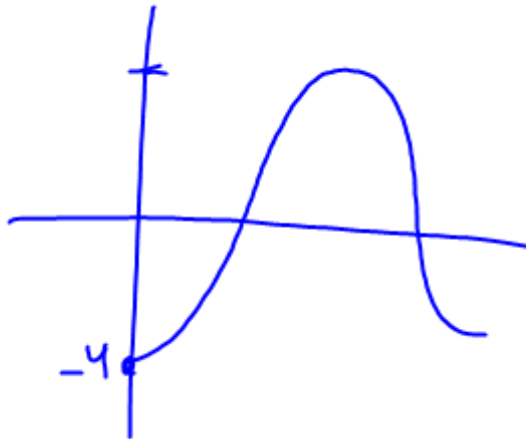
$$b = \frac{2\pi}{P}$$

$$b = \frac{2\pi}{3}$$

sin
cos

$$y = -4 \cos \frac{2\pi}{3} x$$

$$y = 4 \sin \left[\frac{2\pi}{3} \left(x - \frac{3}{4} \right) \right]$$



$$a = 6$$

$$p = 4$$

$$b = \frac{2\pi}{p} = \frac{2\pi}{4} = \frac{\pi}{2} = b$$

$$l = 0 \quad \phi = 0$$

$$y = -6 \cos\left(\frac{\pi}{2}x\right)$$

$$a=2$$

$$p = \frac{1}{3}$$

$$b = \frac{2\pi}{p} \quad b = \frac{2\pi}{\frac{1}{3}} = (6\pi = b)$$

$$y = -2 \cos(6\pi x)$$

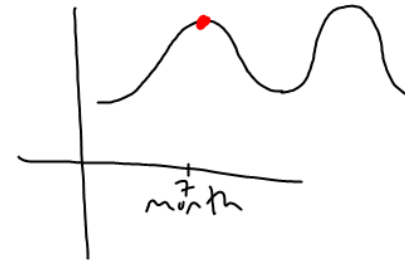
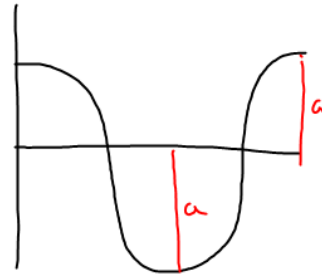
$$y = \pm a \cos[b(x-c)] + d$$

$$a = \frac{\text{high point (y-value)} - \text{low point (y-value)}}{2}$$

$$b = \frac{2\pi}{\text{Period}}, \text{ Period from context}$$

$$c = \text{x-coord. of the high point}$$

$$d = \frac{\text{high point (y-coord)} + \text{low point (y-coord)}}{2}$$



PLEASE CHECK
YOUR EQUATION

- Plug it in the y=
- look at the table for known points